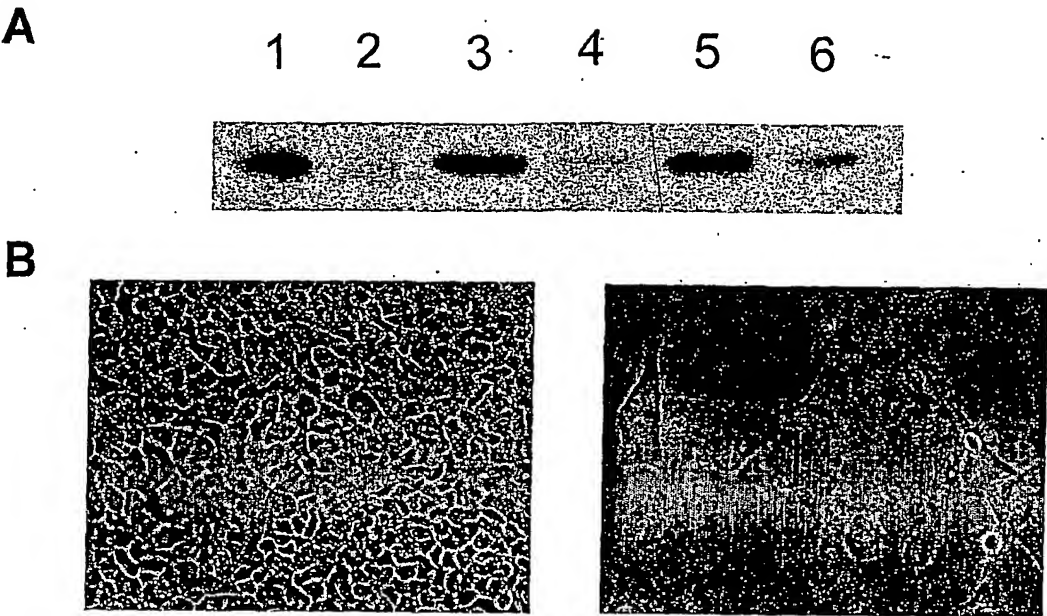


Figure 1



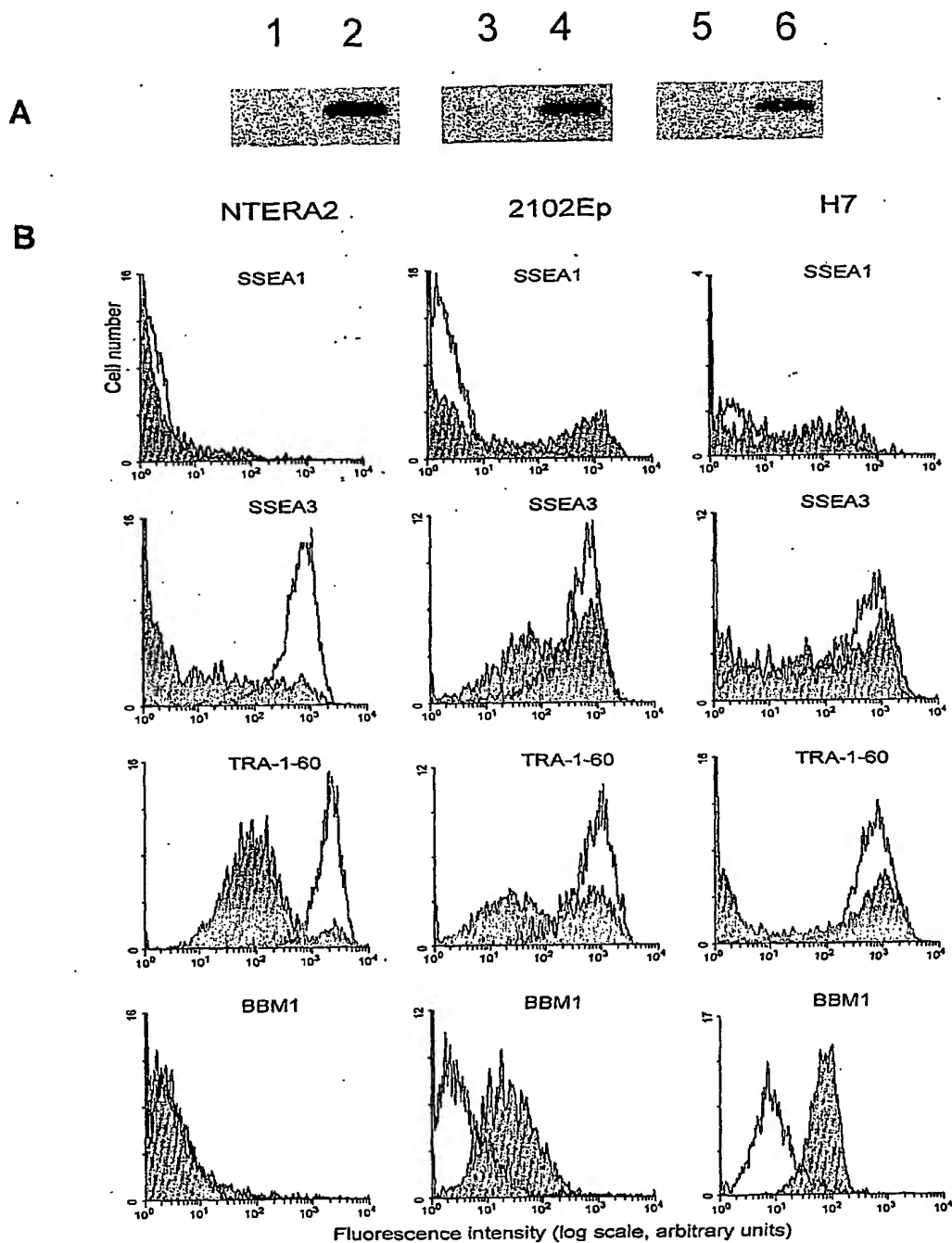
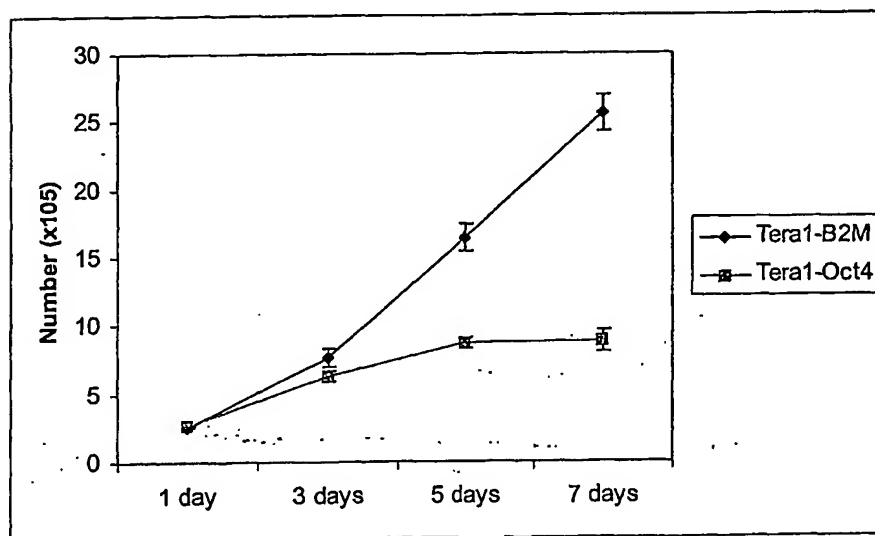
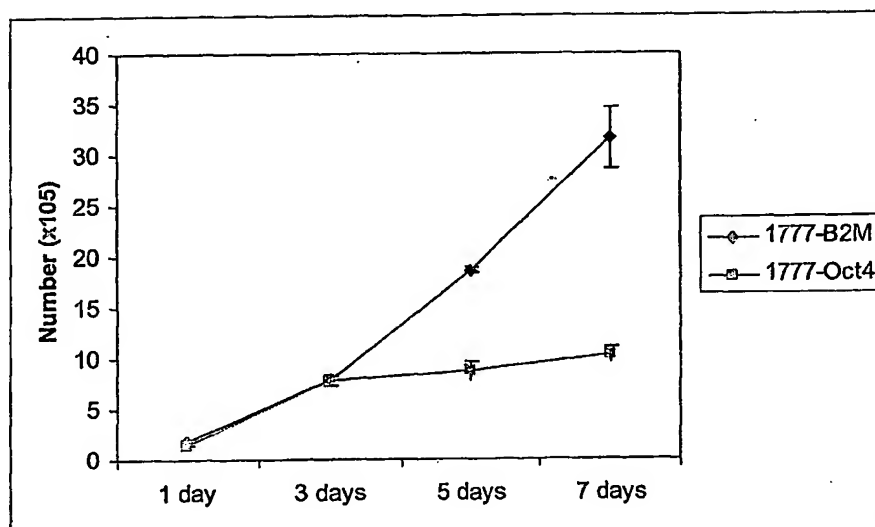
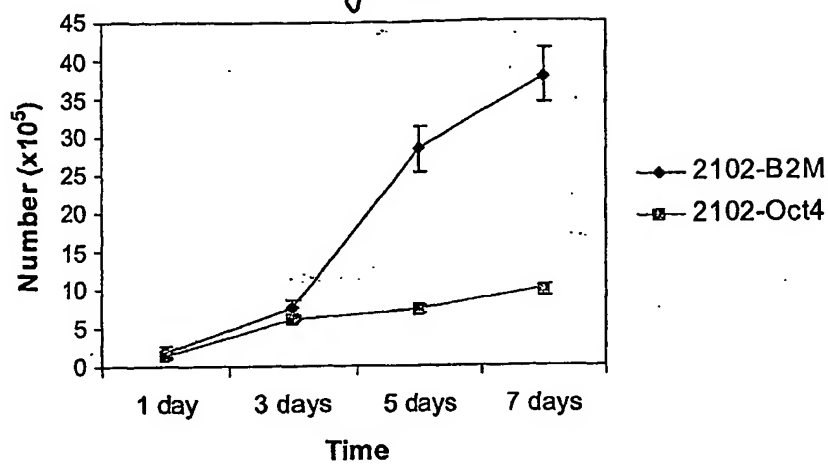


Figure 2

Figure 3



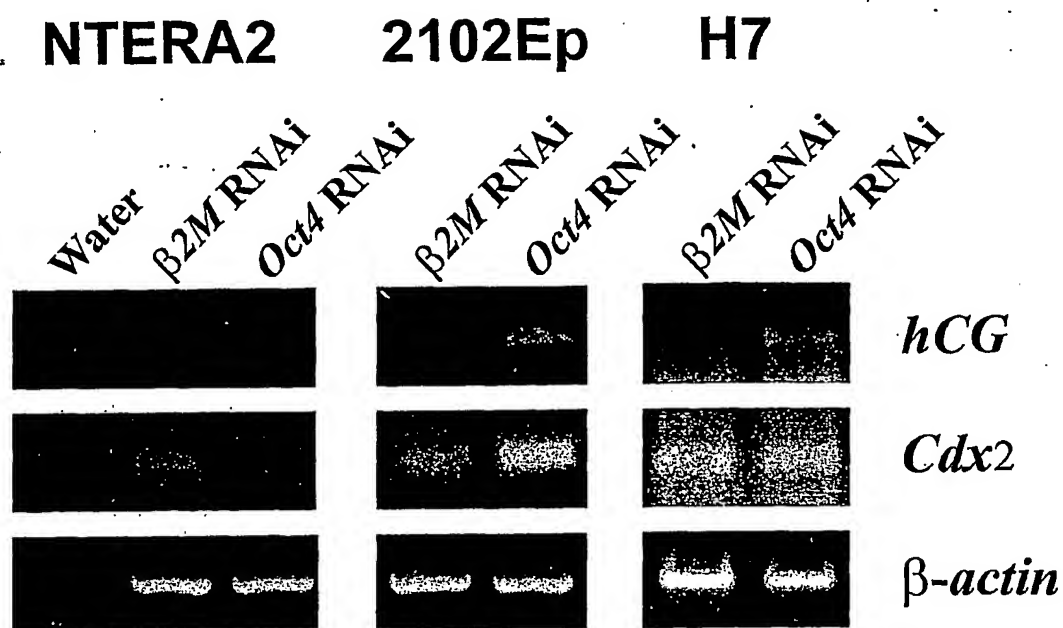


Figure 4

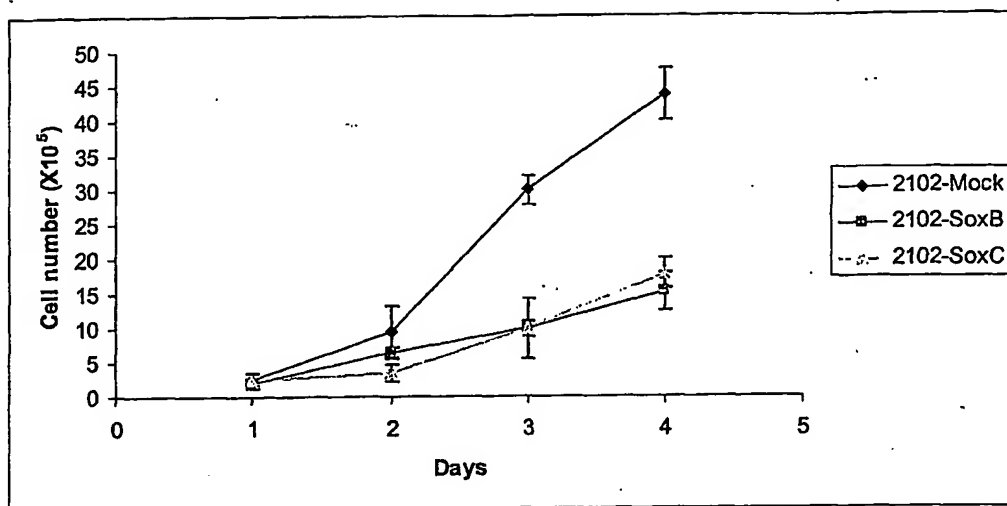


Figure 5

Figure 6

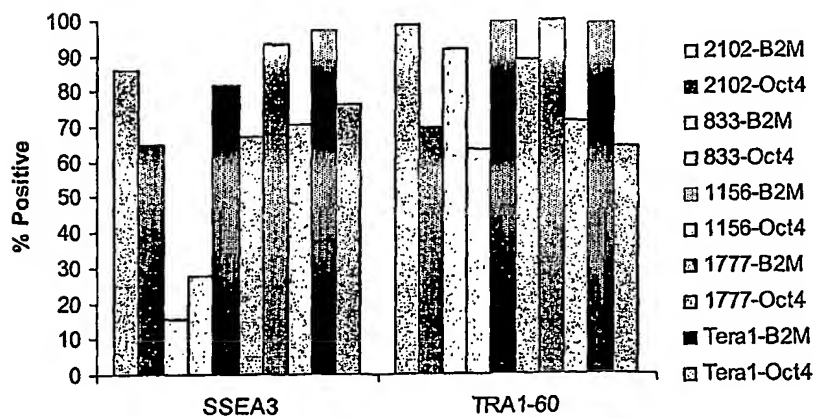
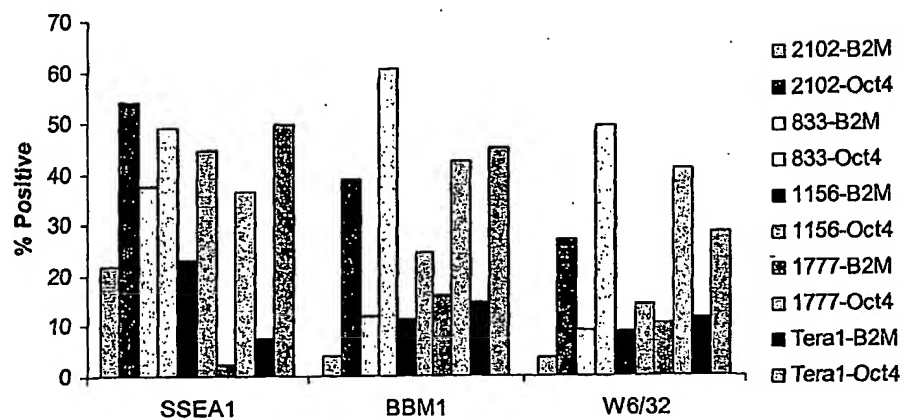
A

Figure 6.

B

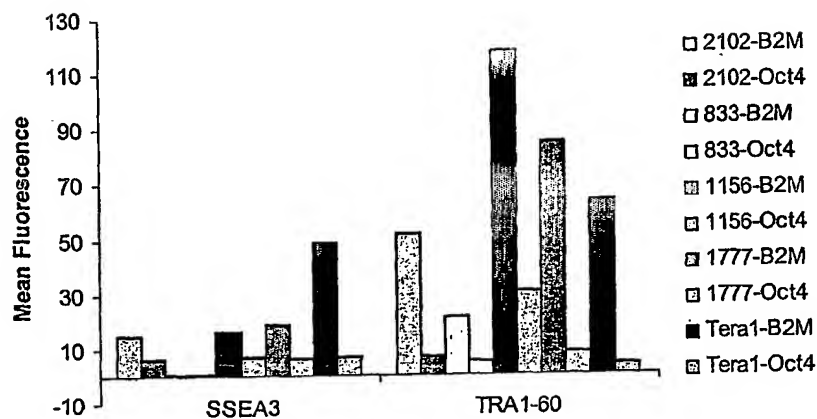
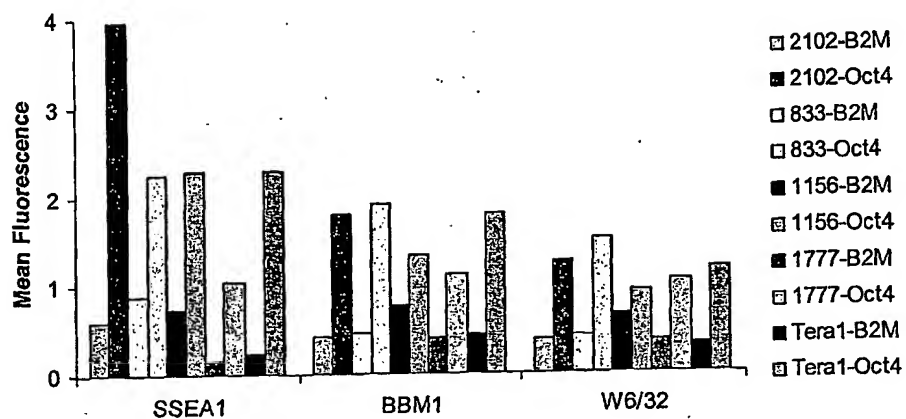


Figure 7

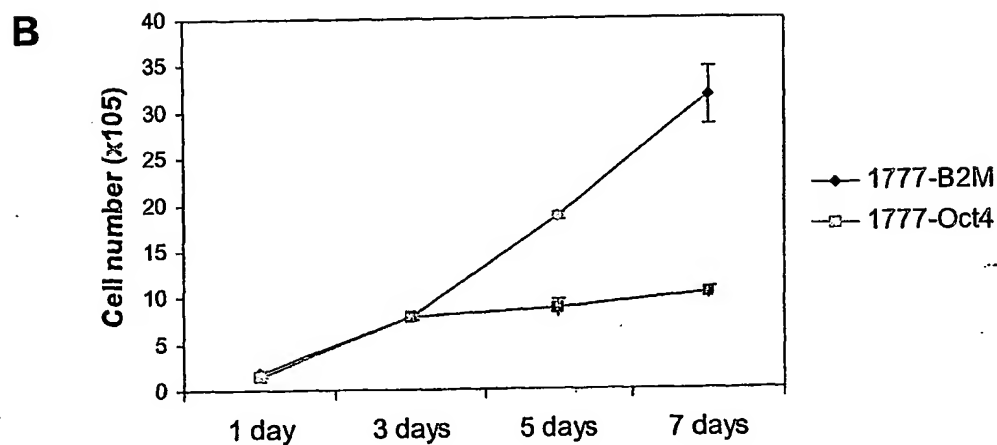
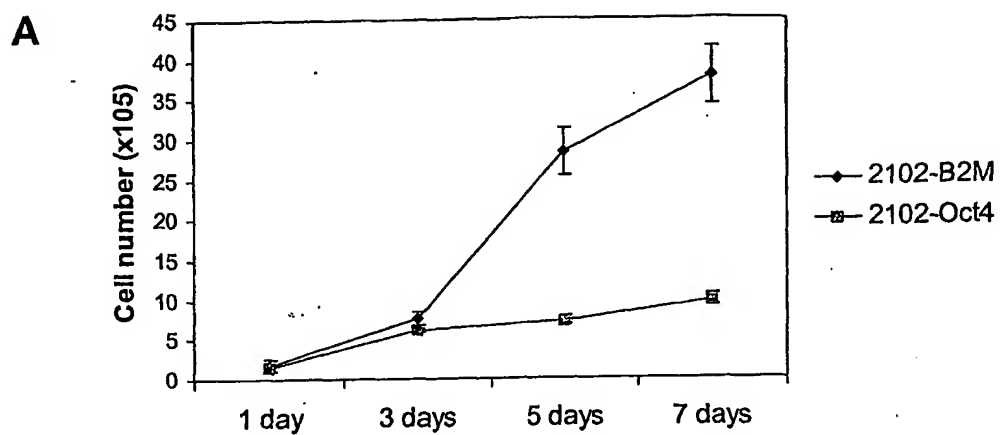
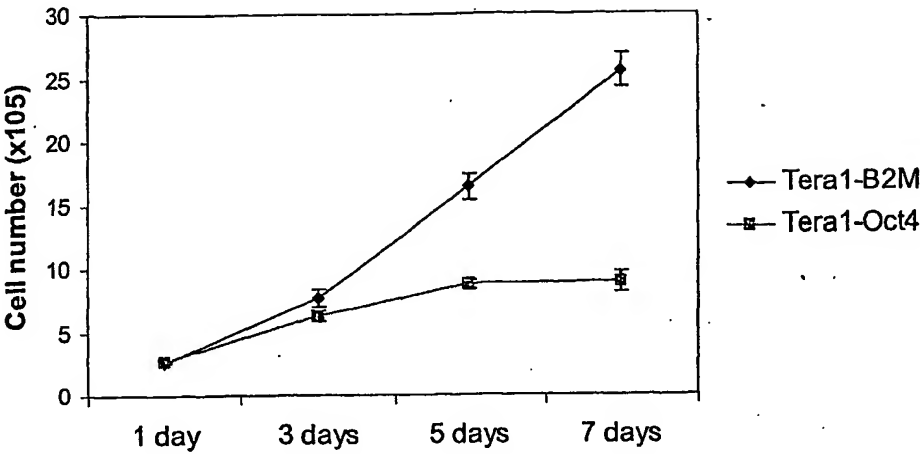
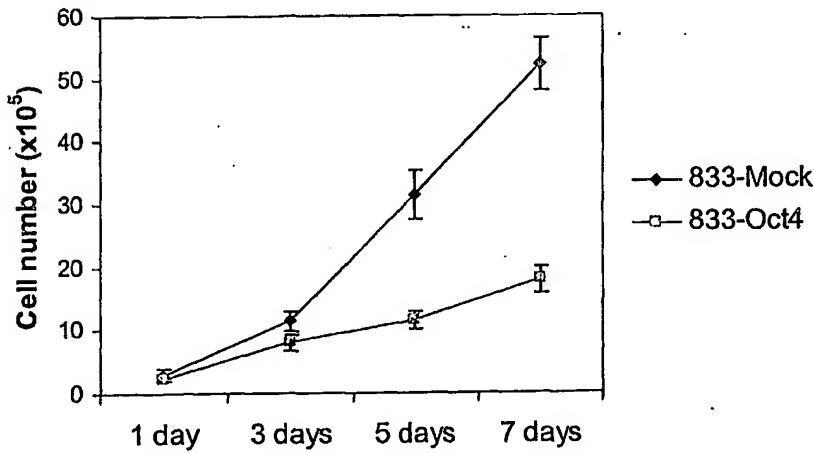


Figure 7

C



D



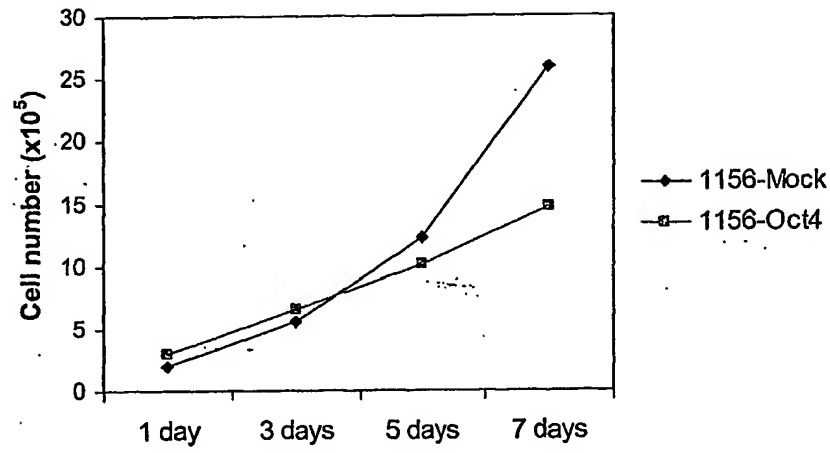
E

Figure 7

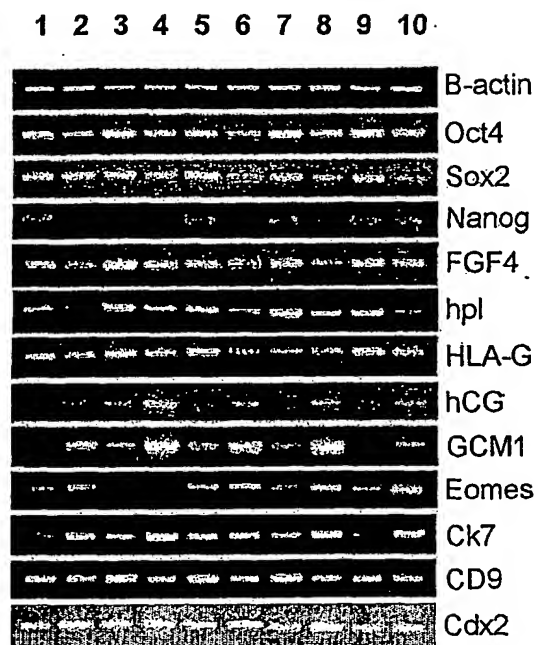


Figure 8

Figure 9

GTAGTCCTTTGTTACATGCATGAGTCAGTGAACAGGGAATGGGTGAATGACATTTGTGGGTAGGTTATTT
 CTAGAAGTTAGGTGGGCAGCTCGGAAGGCAGATGCACTTCTACAGACTATTCCTTGGGGCCACACGTAGG
 TTCTTGAATCCCGAATGGAAAGGGGAGATTGATAACTGGTGTGTTATGTTCTTACAAGTCTTCTGCCTT
 TTAATAATCCAGTCCCAGGACATCAAAGCTCTGCAGAAAGAACTCGAGCAATTTGCCAAGCTCCTGAAGCA
 GAAGAGGATCACCTTGGGATATACACAGGCCGATGTGGGGCTCACCTTGGGGGTTCTATTTGGGAAGGTA
 TTCAGCCAAACGACCATCTGCCGCTTTGAGGCTCTGCAGCTTAGCTTCAAGAACATGTGAAGCTGCCGC
 CCTTGTCTGCAGAAGTGGGTGGAGGAAGCTGACAACAATGAAAATCTTCAGGAGATATGCAAAGCAGAAAC
 CCTCGTGCAGGCCCGAAAGAGAAAGCGAACCCAGTATCGAGAACGAGTGAGAGGCAACCTGGAGAATTTG
 TTCTGTCAGTGGCCGAAACCCACACTGCAGCAGATCAGCCACATCGCCACAGCAGCTTGGGCTCGAGAAGG
 ATGTGTCAGTGTGTTCTGTAAACCGGCGCCAGAAGGCAAGCGATCAAGCAGCGACTATGCACAACG
 AGAGGATTTTGGGCTGCTGGGTCTCCTTCTCAGGGGGACCAAGTGTCTTCTCTGGCCCCAGGGCCC
 CATTTTGGTGCCCCAGGCTATGGGAGCCCTCACTTCACTGCAGTGTACTCTCGGTCCCTTTCCCTGAGG
 GGGAGCCCTTTCCCCCTGTCTGTCTCACCCTCTGGGCTCTCCTTGCATTCAAACCTGAGGTGCTTGCCT
 GCCC'TCTAGGAATGGGGACAGGGGGAGGGGAGGAGCTAGGGAAAGAAAACCTGGAGTTTGTGCCAGGG
 TTTTGGATTAAAGTCTTCACTCACTAAGGAAGGAATTGGGAACAAAGGGTGGGGGACAGGGAGTTTGG
 GGGCAACTGGTTGGAGGGAAGGTGAAGTTCAATGATGCTTGTATTTAATCCACATCATGTATCACTT
 TTTTCTTAATAAAGAGCTTGGGACACAGTAGATAGA

Figure 10a

CTATTAACTTGTTCAAAAAAGTATCAGGAGTTGTCAAGGCAGAGAAGAGAGTGTTCGAAAAAGGGGAAA
 GTAGTTTGCTGCTCTTTAAGACTAGGACTGAGAGAAAGAGAGAGAGAAAGAGAGAGAGAGTT
 TGAGCCCAGGCTTAAGCCTTTCCAAAAATAATAACAATCATCGGCGGCGGAGGATCGGCCAGAG
 GAGGAGGAAGCGCTTTTGTGATCTGATTCCAGTTTGCTCTCTCTTTTTCCTCCCAATTTATTTCT
 CGCTGTATTTTCTCGGGAGCCCTGCGCTCCCGACACCCCGCCGCTCCCTCTCTCTCTCTCTCTCTCT
 CCGCGGGCCCCCAAGTCCCGGCCGGCCGAGGCTCGGCGGCCCGCGGGCCCGGGCCCCGCGCACAG
 CGCCCCCATGTACAACATGATGGAGACGGAGCTGAAGCCCGGGCCCGCAGCAAACCTCGGGGGGCGGC
 GCGGCAACTCCACCGCGCGCGCGGCCGCGGCAACAGAAAAACAGCCCGGACCGGTCAAGCGGCCCA
 TGAATGCCCTTATGGTGTGGTCCCGCGGCGAGCGGCGCAAGATGGCCAGGAGAACCCCAAGATGCACAA
 CTCGGAGATCAGCAAGCGCTGGGCGCGAGTGGAAACTTTTGTGGAGACGGAGAAGCGGCGTTCATC
 GACGAGGCTAAGCGGCTGCGAGCGCTGCACATGAAGGAGCACCCGATTATAAATACCGGCCCGGGCGGA
 AAACCAAGACGCTCATGAAGAAGGATAAGTACACGCTGCCCGCGGGCTGCTGGCCCCCGCGGCAATAG
 CAGTGGCGAGCGGGTGGGGTGGCGCGCCGCTGGGCGCGGGCGTGAACACAGCGCATGGACAGTTACGCG
 CACATGAACGGCTGGAGCAACGGCAGCTACAGCATGATGCAGGACCAGCTGGGCTACCCGAGCACCCGG
 GCCTCAATGCGCAGCGCGCAGCGCAGATGCAGCCCATGCACCGCTACGACGTGAGCGCCCTGCAGTACAA
 CTCCATGACAGCTCGCAGACCTACATGAACGGCTCGCCACCTACAGCATGTCTACTCGCAGCAGGGC
 ACCCTTGGCATGGCTCTTGGCTCCATGGGTTGCGTGGTCAAGTCCGAGGCGAGCTCCAGCCCCCTGTGG
 TTACCTCTTCTCTCCACTCCAGGGCGCCCTGCCAGGCCGGGACCTCCGGGACATGATCAGCATGTATCT
 CCGCGCGCGGAGGTGCCGAACCCGCGCCCCCAGCAGACTTACATGTCCAGCACTACCAGAGCGGC
 CCGGTGCCCGCAGCGCCATTAAACGGCACACTGCCCTCTCACACATGTGAGGGCCGGACAGCGAATGG
 AGGGGGGAGAAATTTCAAAGAAAAACGAGGGAATGGGAGGGGTGCAAAAGAGGAGTAAGAAACAGC
 ATGGAGAAAAACCCGGTACGCTCAAAAAGAAAAAGGAAAAAATAATCCCATCACCCACAGCAATGACA
 GCTGCAAAAGAGAACCAATCCCATCCACACTCACGCAAAACCGCGATGCCGACAAGAAAACTTTTAT
 GAGAGAGATCCTGGACTTCTTTTGGGGGACTATTTTGTACAGAGAAAACCTGGGGAGGGTGGGGAGGG
 CGGGGAATGGACCTTGATAGATCTGGAGGAAAGAAAGTACGAAAACTTTTAAAGTTCTAGTGGT
 ACGGTAGGAGCTTTGCAGGAAGTTTGCAAAAGTCTTTACCAATAATATTTAGAGCTAGTCTCCAAGCGAC
 GAAAAAATGTTTTAATATTTGCAAGCACTTTTGTACAGTATTTATCGAGATAAATGCGCAATCAAAA
 TGTCCATTGTTTATAAGCTGAGAATTTGCCAATATTTTCAAGGAGAGGCTTCTGTGAATTTGATTC
 TGCAGCTGAAATTTAGACAGTTGCAAAAGTGAAGAAAGAAATATTCAAATTTGGACATTTTAATTG
 TTTAAAAATGTACAAAAGGAAAAAATAGAATAAGTACTGGCGAACCATCTCTGTGGTCTTGTTTAAAA
 AGGGCAAAAGTTTTAGACTGTACTAAATTTTATACTTACTGTAAAAAGCAAAATGGCCATGCAGGTTG
 ACACCGTTGGTAATTTATAATAGCTTTTGTTCGATCCCACTTTCCATTTTGTTCAGATAAAAAAACCA
 TGAAATTAAGTGTGTTTGAATATTTTCTATGGTTGTAAATTTCTGTAAATTTATGTGATATTTTAA
 GGTTTTCCCCCTTTATTTCCGTAGTTGTATTTAAAGATTCCGGCTCTGTATTTTGAATCAGTCTG
 CCGAGAATCCATGTATATTTGAACATAATATCCTTTATAACAGGTACATTTTCAACTTAAGTTTTTA
 CTCCTTATGCACAGTTTGAGATAAATAATTTTGAATATGGACACTGAAAAAATAAAAAA

Figure 10b

SoxB

SoxB: 5'-CAACUCCAUGACCAGCUCGdTdT-3' (sense)

SoxC

SoxC: 5'-CGAGCUGGUCAUGGAGUUGdTdT-3' (sense)

Figure 11

GGGAGCGGGCGAGTAGGAGGGGGCGCCGGGCTATATATATAGCGGCTCGGCTCGGGCGGGCTGGCGC
 TCAGGGAGGCGCGCACTGCTCCTCAGAGTCCAGCTCCAGCCGCGCTTTCGCCCCGGCTCGCCGCTCC
 ATGCAGCCGGGTAGAGCCCGGCCCGGGGGCCCCGTCGCTTGCCTCCCGCACCTCCTCGGTTGCGCAC
 TCCCGCCGAGGTGCGCCGTGCGCTCCCGCGGGACGCCACAGGCGCAGCTCGCCCCCAGCTTCCCGGG
 CGCACTGACCGCTGACCGACGACGCGCCCTCGGGCCGGGATGTCGGGGCCCGGACGGCCGCGGTAGCGC
 TGCTCCCGGCGGTCTGCTGGCCTTGTGCGCCCTGGGCGGGCCGAGGGGGCGCCGCGCACCCTGTC
 ACCCAACGGCAGCTGGAGGCGGAGCTGGAGCGCCGCTGGGAGAGCTGGTGGCGCTCTCGTTGGCGCGC
 CTGCCGTTGGCAGCGCAGCCAAAGAGGCGGCCCTCCAGAGCGGCGCCGGCGACTACCTGCTGGGCATCA
 AGCGGCTGCGGCGGCTCTACTGCAACGTGGGCATCGGCTTCCACCTCCAGGCGCTCCCCGACGGCCGAT
 CGGCGGCGCGCACGCGGACACCGCGACAGCCTGCTGGAGCTCTCGCCCGTGGAGCGGGCGCTGGTGAGC
 ATCTTCGCGGTGGCCAGCCGCTTCTCGTGGCCATGAGCAGCAAGGGCAAGCTCTATGGCTCGCCCTTCT
 TCACCGATGAGTGACGTTCAAGGAGATTCTCTTCCCAACAATAACAACGCTACAGTCTTACAAGTA
 CCCCCGATGTTTATCGCCCTGAGCAAGAATGGGAAGACCAAGAAGGGGAACCGAGTGTGCCCCACCATG
 AAGGTCAACCACTTCTCCCCAGGCTGTGACCTCCAGAGGACCTTGCTTCAGCTCGGGAGCGCCCTG
 GGAGGGCAGTGCCAGGGGTACCTTGGTGCACTTCTTGGATGAAGAGTTTAAATGCAAGAGTAGGTGTAA
 GATATTTAAATTAATTATTTAAATGTGTATATATTGCCACCAATTTATTTAGTTCTGCGGGTGTGTTT
 TTTAATTTCTGGGGGAAAAAAGACAAAAACCAACTCTGACTTTTCTGGTGCAACAGTGGAG
 AATCTTACCATTGGATTCTTTAACTTGT

Figure 12

GGTTTCCGGAGCTGCGGCGCGCAGACTGGGAGGGGAGCCGGGGTTCCGACGTCGCAGCCGAGGGAAC
 AAGCCCCAACCGGATCCTGGACAGGACCCCGGCTTGGCGCTGTCTCTCCCCCTCGGCTCGGAGAGGCCC
 TCGGCTGAGGGAGCCTCGCCGCCGTCCCGGCACACGCGCAGCCCCGGCTCTCGGCTCTGCCGGA
 GAAACAGGATGGCCCAATGGAATCAGCTACAGCAGCTTGACACAGGTACCTGGAGCAGCTCCATCAGCT
 CTACAGTGACAGCTTCCCAATGGAGCTGCGGCAGTTTCTGGCCCCCTGGATTGAGAGTCAAGATTGGGCA
 TATGCGGCCAGCAAGAATCACATGCCACTTGGTGTTCATAATCTCTGGGAGAGATTGACCAGCAGT
 ATAGCCGCTTCTTGCAAGAGTCGAATGTTCTATCAGCACAATCTACGAAGAATCAAGCAGTTTCTTCA
 GAGCAGGTATCTTGAGAAGCCAATGGAGATTGCCCGGATTGTGGCCCGGTGCTGTGGGAAGAATCACGC
 CTTCTACAGACTGCAGCCACTGCGGCCAGCAAGGGGGCCAGGCCAACACCCACAGCAGCCGTGGTGA
 CGGAGAAGCAGCAGATGCTGGAGCAGCACCTTCAGGATGTCCGGAAGAGAGTGCAGGATCTAGAACAGAA
 AATGAAAGTGGTAGAGAATCTCCAGGATGACTTTGATTTCAACTATAAAACCTCAAGAGTCAAGGAGAC
 ATGCAAGATCTGAATGGAACAACAGTCAGTGACAGGCAGAGATGCAGCAGCTGGAACAGATGCTCA
 CTGCGCTGGACAGATGCGGAGAAGCATCGTGAGTGAGCTGGCGGGGCTTTTGTGAGCGATGGAGTACGT
 GCAGAAACTCTCAGGACGAGGAGCTGGTGACTGGAAGAGGCGGCAACAGATTGCCTGCATTGGAGGC
 CCGCCCCAACATCTGCCTAGATCGGCTAGAAAAGTGGATAACGTCATTAGCAGAATCTCAACTTCAGACCC
 GTCAACAAATTAAGAACTGGAGGAGTTGCAGCAAAAGTTTCTTACAAAGGGGACCCATTGTACAGCA
 CCGGCCGATGCTGGAGGAGAGAATCGTGGAGCTGTTAGAACTTAATGAAAGTGCCTTTGTGGTGGAG
 CGGCAGCCCTGCATGCCCCATGCATCTGACCGGCCCTCGTCATCAAGACCGGCTCAGTTCACTACTA
 AAGTCAGTTGCTGGTCAAATTCCTGAGTTGAATTATCAGCTTAAATTAAGTGTGATTGACAAAGA
 CTCGGGACGTTGCAGCTCTCAGAGGATCCCGAAATTTAACATTCTGGGCACAAACAAAAAGTGATG
 AACATGGAAGAATCCAACAACGGCAGCCTCTCTGCAGAATTCAAACACTTGACCCTGAGGGAGCAGAGAT
 GTGGGAATGGGGGCGGAGCCAATTGTGATGCTTCCCTGATTGTGACTGAGGAGCTGCACCTGATCACCTT
 TGAGACCGAGGTGATCACCAAGGCCTCAAGATTGACCTAGAGACCCACTCTTGCCAGTTGTGGTGATC

TCCAACATCTGTGATGATGCCAAATGCCTGGGCGTCCATCCTGTGGTACAACATGCTGACCAACAATCCCA
 AGAATGTAACTTTTTTACCAAGCCCCCAATTGGAACCTGGGATCAAGTGGCCGAGGTCTGTGAGCTGGCA
 GTTCTCCTCCACCACCAAGCGAGGACTGAGCATCGAGCAGCTGACTACACTGGCAGAGAACTCTTGGGA
 CCTGGTGTGAATTATTAGGGTGTGAGATCACAATGGGCTAAATTTTGCAAAGAAAACATGGCTGGCAAGG
 GCTTCTCCTTCTGGGCTGGCTGGACAATATCATTGACCTTGTGAAAAAGTACATCCTGGCCCTTTGGAA
 CGAAGGGTACATCATGGGCTTTATCAGTAAGGAGCGGGAGCGGGCCATCTTGAGCAGTAAGCCTCCAGGC
 ACCTTCCTGCTAAGATTAGTGAAGCAGCAAGAAGGAGGCGTCACTTTCACTTGGGTGGAGAAGGACA
 TCAGCGGTAAGACCCAGATCCAGTCCGTGGAACCATACACAAAGCAGCAGCTGAACAAACATGTCTATTGCT
 TGAATCATCATGGGCTATAAGATCATGGATGCTACCAATATCCTGGTGTCTCCACTGGTCTATCTCTAT
 CCTGACATTTCCAAGGAGGAGGCATTCCGAAAGTATTGTGGCCAGAGAGCCAGGAGCATCCTGAAGCTG
 ACCCAGGCGCTGCCCATACCTGAAGACCAAGTTTATCTGTGTGACACCAACGACCTGCAGCAATACCAT
 TGACCTGCCGATGTCCCCCGCACTTTAGATTCACTGATGAGTTTGGAAATAATGGTGAAGGTGCTGAA
 CCCTCAGCAGGAGGGCAGTTTGAGTCCCTCACCTTTGACATGGAGTTGACCTCGGAGTGGCTACCTCCC
 CCATGTGAGGAGCTGAGAACGGAAGCTGCAGAAAGATACGACTGAGGCGCTACCTGCATTCTGCCACCC
 CTCACACAGCCAAACCCAGATCATCTGAACTACTAATTTGTGGTTCCAGATTTTCTTAATCTCTCTA
 CTTCTGCTATCTTTGAGCAATCTGGGCACTTTTAAAAATAGAGAAATGAGTGAATGTGGGTGATCTGCTT
 TTATCTAAATGCAAATAAGGATGTGTTCTCTGAGACCCATGATCAGGGGATGTGGCGGGGGGTGGCTAGA
 GGGAGAAAAGGAAATGTTCTGTGTTGTTTGTGTTCCCTGCCCCCTCTTCTCAGCAGCTTTTGTATTG
 TTGTTGTTGTTCTTAGACAAGTGCCTCCTGGTGCCTGCGGCATCCTTCTGCTGTTCTGTAGCAAAATG
 CCACAGGCCACCTATAGCTACATACTCCTGGCATTGCATTTTAACTTGTCTGACATCCAAATAGAAGA
 TAGGACTATCTAAGCCCTAGGTTTCTTTTAAATTAAGAAATAATAACAATTAAGGGCAAAAACACTG
 TATCAGCATAGCCTTTCTGTATTAAAGAACTTAAGCAGCCGGGATGGTGGCTCAGCCTGTAATCCCA
 GCATTTGGGAGGCCGAGGCGGATCATAAGGTGAGGATCAAGACCATCCTGGCTAACACGGTGAACCC
 CCGTCTCTACTAAAGTACAAAAAATTAGCTGGGTGTGGTGGTGGGCGCTGTAGTCCCAGCTACTCGGG
 AGGCTGAGGCGAGGAATCGCTTGAACCTGAGAGGCGGAGGTTGAGTGAAGCCAAATTGACCACTGCA
 CACTGCATCCATCCTGGGCGACAGTCTGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Figure 13

>gi|13376297|ref|NM_024865.1| Homo sapiens Nanog homeobox (NANOG), mRNA
 ATTATAATCTAGAGACTCCAGGATTTTAACGTTCTGTGGACTGAGCTGGTTCCTCATGTTATTATG
 AGGCAACTCACTTTATCCCAATTCTTGATACCTTTCTCTGGAGGTCTTATTTCTTAACATCTTCCA
 GAAAGTCTTAAAGCTGCCTTAACCTTTTCCAGTCCACCTCTTAAATTTTCTCTCTCTCTCTAT
 ACTAACATGAGTGTGGATCCAGCTTGTCCCAAAGCTTGCCTTGTCTTGAAGCATCCGACTGTAAAGAA
 CTTACCTATGCCTGTGATTTGTGGGCTGAAGAAATATCCATCCTTGCAAATGTCTTCTGCTGAGAT
 GCCTCACACGGAGACTGTCT
 TCCACCACTCCCAAGGCAAAACCAACCACTTCTGCAGAGAATAGTGTGCGAAAAAGGAAGACAAGGTCC
 CAGTCAAGAAACAGAACAGCAAGCACTGTGTTCTCTTCCACCACTGTGTGTAATCAATGATAGATTCA
 GAGACAGAAATACCTCAGCCTCCAGCAGATGCAAGAACTCTCCAACTCTGAACCTCAGCTACAAACAG
 GTGAAGACCTGGTTCCAGAACCAGAGAATGAATCTAAGAGGTGGCAGAAAAACAACCTGGCCGAAGAATA
 GCAATGGTGTGACGCAAGAGGCTCAGCACCTACCTACCCAGCCTCTACTCTTCTTACCACAGGGATG
 CCTGGTGAACCCGACTGGGAACCTTCCAATGTGGAGCAACCAAGCCTGGAAACAATCAACCTGGAGCAAC
 CAGACCCAGAACATCCAGTCTTGGAGCAACCACTCTTGGAACTCAGACCTGGTGCACCCCAATCCTGGA
 ACAATCAGGCTGGAACAGTCCCTTCTATAACTGTGGAGAGGAATCTCTGCAGTCTGCTGATGCAATTCCA
 GCCAAATCTCTCTGCACTGACTTGGAGGCTGCTTGGAGCTGCTGGGGAAGGCCCTTAATGTAATACAG
 CAGACCACTAGGTATTTAGTACTCCACAAACCATGGATTTATCTTAACTACTCCATGAACATGCAAC
 CTGAAGACGTGTGAAGATGAGTGAAGTGAATTAATCTCAATTTAGTCTGACACTGGCTGAATCCTTCC
 TCTCCCTCTCTCCATCCCTCATAGGATTTTCTGTTTGGAAACCACTGTTCTGGTTTCCATGATGCC
 TATCCAGTCAATCTCATGGAGGTGGAGTATGGTTGGAGCCTAATCAGCGAGGTTCTTTTTTTTTTTTT
 CCTATTGGATCTTCTGGAGAAAATACTTTTTTTTTTTTTTTTGGAGCGAGTCTTGCTCTGTGCGCCAG
 GCTGGAGTGCAGTGGCGCGGCTTGGCTCACTGCAAGCTCCGCTCCCGGTTTCAAGCCATCTCCTGCC
 TCAGCCTCCCGAGCAGCTGGGACTACAGGCGCCGCACTCGCCCGGCTAATATTTGTATTTTGTAGTA
 GAGACAGGGTTTCACTGTGTTAGCCAGGATGGTCTCGATCTCCTGACCTTGTGATCGGCCCGCTCGGCC
 TCCCTAACAGCTGGGATTACAGGCGTGAGCCACCGCGCCCTGCTAGAAAAGACATTTTAATAACCTTGG
 CTGCTAAGGACAACATTTGATAGAAGCCGCTCTGGCTATAGATAAGTAGATCTAATACTAGTTTGGATAT
 CTTTAGGGTTTGAATCTAACCCTCAAGAAATAAGAAATACAAGTACGAATTTGGTGAAGATGATTCTGT
 ATTGTTTGGGATTGGGAGGCTTGTCTATTTTTTTTAAACTATTGAGGTAAAGGGTTAAGCTGTAACATA
 CTTAATTGATTTCTTACCGTTTGTGGCTGTGTTTGTCTATATCCCTAATTTGTTGGTGTGCTAATCTT
 TGTAGAAAGAGGTCTGTATTTGCTGCATCGTAATGACATGAGTACTACTTTAGTTGGTTTAAAGTTCAAA
 TGAATGAACAAATATTTTCTTTAGTTGATTTTACCCTGATTTACCGAGTGTTCGATGAGTAATA
 TACAGCTTAAACAT

Figure 14

GGAGAATCCCGGAAAGGCTGAGTCTCCAGCTCAAGGTCAAAACGTCCAAGGCCGAAAGCCCTCCAGTTT
 CCCCTGGACGCTTCTGCTCTCTGCTACGACCTTCTGGGGAAAACGAATTTCTCATTCTTCTTAA
 ATTGCCATTTTCGCTTAGGAGATGAATGTTTTCTTTGGCTGTTTTGGCAATGACTCTGAATTAAGCG
 ATGCTAACGCCCTCTTTCCCCCTAATTGTTAAAGCTATGGACTGCAGGAAGATGGCCCGCTTCTCTTAC
 AGTGTGATTTGGATCATGGCCATTTCTAAAGTCTTTGAACTGGGATTAGTTGCCGGGCTGGGCCATCAGG
 AATTTGCTCGTCCATCTCGGGGATACCTGGCCCTCAGAGATGACAGCATTGGCCCCAGGAGCCCTGC
 AATTGGCCCTCGGTCTTCCAGCGTGTGCCGCCCATGGGATACAGCACAGTAAGGAGCTAAACAGAACCC
 TGCTGCCTGAATGGGGGAACCTGCATGCTGGGGTCTTTTGTGCTGCCCTCCCTCTCTACGGACGGA
 ACTGTGAGCAGATGTGCGCAAAGAGAACTGTGGGTCTGTGCCCATGACACCTGGCTGCCCAAGAAAGTG
 TTCCCTGTGTAAATGCTGGCAGCGTCAGCTCCGCTGCTTTCTCAGGCATTCTACCCGGCTGTGATGGC
 CTTGTGATGGATGAGCACCTCGTGGCTTCCAGGACTCCAGAACTACCACCGTCTGCACGTACTACCACTT
 TTATGCTAGTTGGCATCTGCCTTTCTATACAAAGCTACTATTAATCGACATTGACCTATTTCCAGAAATA
 CAATTTAGATATCATGCAAATTTTCATGACCAGTAAAGGCTGCTGCTACAATGTCTTAAGTAAAGATGA
 TCATTTGTAGTTGCCCTTAAATAATGAATACAATTTCCAAATGGTCTCTAACATTTCTTACAGAACTA
 CTTCTTACTTCTTTGCCCTGCCCTCTCCCAAAAACACTACTTCTTTTTCAAAAGAAAGTCAGCCATATCT
 CCATTTGTGCTAAGTCCAGTGTCTTTCTTTTCTTTTGTGAGACGGAGTCTCACTCTGTACCCAGG
 CTGGACTGCAATGACGCGATCTTGGTTCACTGCAACCTCCGCATCCGGGTTCAAGCCATTCTCTGCT
 AAGCCTCCCAAGTAAGTGGGATTACAGGCATGTGTACCATGCCAGCTAATTTTGTATTCTTAGTAG
 AGATGGGGGTTTACCATATTGGCCAGTCTGGTCTCGAACTCTGACCTTGTGATCCATCGATCAGCCTCT
 CGATGTGCTGAGATTACACACGTGAGCAACTGTGCAAGGCTGGTGTCTTGTATACATGTAATTTCTACCA
 AGGTCTTCTAATATGTTCTTTTAAATGATTGAATTATATGTTTCAATTTATGGAGACTAATTTCTAATGT
 GGACCTTAGAATACAGTTTGTAGTAGAGTTGATCAAAATCAATTAAGTCTCTTTAAAGGAAAGAA
 AACATCTTTAAGGGGAGGAACAGAGTGTGAAGGAATGGAAGTCCATCTGCGTGTGTGAGGGAGACTG
 GGTAGGAAGAGGAAGCAATAGAAAGAGAGAGTTGAAAAACAAATGGGTACTTGAATGGTGAATAGG
 TGGTGGTAGAGAAGCAAGTAAAGGCTAAATGGAAGGCAAGTTCCATCATCTATAGAAAGCTATATA
 AGACAAGAACTCCCTTTTTCCTCAAGGCATTATAAAAGAAATGAAGCCTCCTTAGAAAAAAATATAT
 ACCTCAATGTCCCCAACAAGATTGCTTAATAAATGTGTTCCTCCAAGCTATTCAATCTTTTAACTGT
 TGTAGAAGACAAAATGTTCAATATATTTAGTTGTAAACCAAGTGATCAACTACATATTGTAAAGCCC
 ATTTTAAATAACATTGTATATATGTGTATGCACAGTAAAAATGGAACTATATTGACCTAAAAAATAA
 AAA

Figure 15

GGAGCTCTCCCGGTCTGACAGCCACTCCAGAGGCCATGCTTCGTTTCTTGCCAGATTTGGCTTTTCACT
 TCCTGTTAATCTGGCTTTGGGCCAGGCAGTCCAATTTCAAGAATATGCTTTCTCCAATTTCTGGGCTT
 AGATAAGGCGCCTTACCCAGAAAGTTCCAACCTGTGCTTATATCTTGAAGAAATTTTCCAGGATCGC
 GAGGCGAGCAGCCACTGGGGTCTCCCGAGACTTATGCTACGTAAAGGAGCTGGGCGTCCGCGGGAATG
 TACTTCGCTTTCTCCAGACCAAGGTTCTTTCTTTACCCAAAGAAATTTCCCAAGCTTCTCTCTGCT
 GCAGAAGCTCTCTACTTTAACCTGTCTGCCATCAAGAAAGGGAACAGTTGACATTGGCCAGCTGGGC
 CTGGACTTGGGGCCCAATTTCTACTATAACCTGGGACCAGAGCTGGAACCTGGCTCTGTTCTGCTCAGG
 AGCCTCATGTGTGGGGCCAGACCACCCCTAAGCCAGGTAAATGTTTGTGTGCGGTCACTCCCATGGCC
 ACAAGGTGTGTTCACTTCAACCTGTCTGGATGTAGCTAAGGATTGGAATGACAACCCCGGAAAAATTTT
 GGGTTATCTCTGGAGATACTGGTCAAGAAGATAGAGACTCAGGGGTGAATTTTCAAGCTGAAGACACCT
 GTGCCAGATAAGATGCTCCCTTCACTGCTTCCCTGCTGGTGGTGAATCTCAACCTGATCAGTGGCACCC
 TTCTCGGAAAAGGAGAGCAGCCATCCCTGTCCCAAGCTTTCTGTGAAGAACCTTGCCACCGTCAACAG
 CTATTCATTAACCTTCCGGACCTGGGTGGCACAAGTGGATCATGTGCCCAAGGGGTTTCAAGGCAAT
 ACTGCCATGGAGAGTGTCCCTTCTCACTGACCATCTCTCTCAACAGCTCCAATATGCTTTTCAAGC
 CCTGATGATGCGGTTGACCCAGAGATCCCCAGGCTGTGTATCCCCAAGCTGTCTCCCATTTCC
 ATGCTCTACCAGGACAATAATGACAATGTCAATCTACGACATTATGAAGACATGGTAGTCGATGAATGTG
 GGTGTGGGTAGGATGTGAGAAATGGGAATAGAAGGAGTGTCTTAGGGTAAATCTTTAATAAACTACC
 TATCTGGTTTATGACCCTTAGATCGAAATGTCA

Figure 16

GGCACCCCTTCGGCGAGCGCTGTTTGTATTAGGGCTCGGTGAGTCCAATCAGGAGCCAGGCTGCAGTTTTC
 CGGCAGAGCAGTAAGAGGCGCCTCCTCTCTCTTTTATTACCAGCAGCGCGCGCAGACCCCGGACTC
 GCGCTCGCCCGTGGCGCCCTCGGCTTCTCTCGCGCTGGGAGCACCTCCGCGCGGCGGCTTCTCCAT
 GCGCAGCGCCCGCGAGGAGCTAGACGTGAGCTTGGAGCGCGCGCGGACCGTGGATGGCCTTGACTGAC
 GCGCGCTGGTGTGTCGGAAGCGCTTCGGGGCGCGGGTGGGACGCCAGCGACTCCAGAGCCTTTCCAG
 CGCGGAGCCCTCCAGCGCCCTTCCCATCTCTCTCTGCTCTCTCTGCTCCCGGGCGGAGCGG
 GGGCCCCGCGCGCGCAGCAACTGCGGGACGCTCAGCTCGACACGGAGGCGCGCGGCGGACCCCGGCC
 CGCTCGCTGCTGCTCAGTTCTACGCTTCGCATCCCTTCGGGGCTCCCGACGACCTTCGCGCCTGGGG

TCGCGGGCCCCGGGGGCAACCTGTCGAGCTGGGAGGACTTGCTGCTGTTCACTGACCTCGACCAAGCCGC
 GACCGCCAGCAAGCTGCTGTGGTCCAGCCGCGCGCCAGCTGAGCCCCCTTCGCACCCGAGCAGCCGGAG
 GAGATGTACCAGACCCCTCGCCGCTCTCTCCAGCCAGGGTCCGGCCGCTACGACGGCGCGCCCGGGCGGT
 TCGTGCACTCTGCGGCGCGCGGCGAGCAGCCGCGCGCGGCCAGCTCCCCGGTCTACGTGCCCCACAC
 CCGCGTGGGTTCCATGCTGCCCGGCTACCGTACCACCTGCAGGGGTCCGGCAGTGGGCCAGCCAACCAC
 GCGGGCGCGCGCGGCGCACCCGCGTGGCCTCAGGCCTCGGCCGACAGCCCTCCATACGGCAGCGGAG
 GCGGCGCGGTGGCGCGCGGGCCGCGGGGCTGGCGGCGCTGGCTCAGCCGCGGCGCACGTCTCGGCGCG
 CTTCCCTACTCTCCAGCCCGCCCATGGCCAACGGCGCGCGCGGGAGCCGGAGGCTACGCGGCGCGCG
 GGCAGTGGGGCGCGCGGAGGCGTGAGCGGCGCGGCGAGTAGCTGGCGGCCATGGGCGGCGCGAGCCCC
 AGTACAGCTCGCTGTGCGCGCGCGCGCGCTGAACGGGAGCTACCACCACCACCACCACCACCACCA
 CCATCCGAGCCCTACTCGCCCTACGTGGGGGCGCCACTGACGCTGCTGGCCCGCGGACCCCTTCGAG
 ACCCGGTGCTGCACAGCCTGCAGAGCCGCGCGGAGCCCGCTCCCGGTGCCCGGGGTCCCAGTGCGAG
 ACCTGCTGGAGGACCTGTCCGAGAGCCGCGAGTGCCTGAACCTGCGGCTCCATCCAGACGCGCTGTGGCG
 GCGGGACGGCACCGGCCACTACCTGTGCAACGCTGCGGGCTCTACAGCAAGATGAACGGCTCAGCCGG
 CCCCCTCATCAAGCCGAGAACGCGCTGCTTATCACGCGGCTTGGATTGTCTGTGCCAACTGTCA
 CCACAACTACCACCTTATGGCGCAGAAACGCGAGGGTGAACCCGTGTGAATGCTTGTGGACTCTACAT
 GAACTCCATGGGGTGCCAGACCACTTGCTATGAAAAAGAGGGAATTCAAACCAGGAAACGAAAACT
 AAGAACATAAATAAATCAAGACTTGCTGTGTAATAGCAATAATCCATTCCCATGACTCCAACCTCCA
 CCTCTTCTAACTCAGATGATTGCAGCAAAATACTTCCCCACAACACACCTACAGCCTCAGGGGCGGG
 TGCCCCGGTGATGACTGGTGGGGAGAGAGCAACATCCCGAGAACAGCGAGCTCAAGTATTCGGGTCAA
 GATGGGCTCTACATAGGCGTCAGTCTCGCCTCGCCGCGGAGTACGTCCTCCGTGCGACCGGATTCCT
 GGTGCGCCCTGGCCCTGGCGCCACGCGCGCAGGAGGAGGGCTCCGCGCGGGGCTCACTC
 CACTCGTGTCTGCTTTTGTGCGCGGTCCAGACAGTGGCGACTGCGCTGACAGAACGTGATTCTCGTGCC
 TTTATTTTGAAGAGATGTTTTCCTCAAGAGGCTTGCTGAAAGAGTGAGAGAGATGGAAGGGAAGGGCC
 AGTGCAACTGGGCGCTGGGCCACTCCAGCCAGCCCGCTCCGGGCGGACCCCTGCTCCACTTCCAGAAG
 CCAGGACTAGGACCTGGGCCCTTGCTGCTATGGAATATTGAGAGAGATTTTTTAAAAAGATTTTGCATT
 TTGTCCAAATCATGTGCTTCTTCTGATCAATTTTGGTTGTTCCAGAATTTCTTCATACCTTTTCCACAT
 CCAGATTTCTATGTGCTTCTGAGAGAGATCACTTGAGGCCATTTGTTACACATCTCTGGAGGCTGAGTC
 GGTTCATGAGGTCTCTTATCAAAATATTACTCAGTTTGCAAGACTGCATTGTAACCTTTAACATACACTG
 TGACTGACGTTTCTCAAAGTTCATATGTGCTGCTGATCTGAAGTCAGTCGGAATTTGTAAACAGGGTAG
 CAAACAAGATATTTTCTTCCATGTATACAATAATTTTTTAAAAAGTGCAATTTGCGTTGCAGCAATCA
 GTGTTAAATCATTTGCATAAGATTTAACAGCATTTTTTATAATGAATGTAAACATTTTAACTTAATGGTA
 CTTAAAAATATTTAAAGAAAAATGTAACTTAGACATTTCTATGCTTCTTTTACAACATACATCCATTT
 TATATTCCAATTTGTTAAAGAAAAATTTCAAGAACAAATCTCTCAGGAAAATTGCCTTTCTCTAT
 TTGTTAAGAAATTTTATACAAGAACCAATATACCCCTTTATTTTACTGTGGAATATGTGCTGCAAAA
 ATTGCAACAACACTTTACTACCTAACGGATAGCATTTGTAAATACTCTAGGTATCTGTAAACACTCTGAT
 GAAGTCTGTATAGTGTGACTAACCCACAGGCAGGTTGGTTTACATTAATTTTTTTTTTGAATGGGATGT
 CCTATGAAACCTATTTACCAGAGTTTAAAAATAAAAGGGTATTGTTTGTCTTCTGTACAGTGAGT
 TCCCTTCCCTTTTCAAAGCTTTCTTTTATGCTGTATGTGACTATAGATATTCATATAAAACAAGTGACAG
 TGAAGTTTGCAAAATGCTTTAAGGCTTCCCTTCAAAGCATAGTCTTTTGGAGCCGTTTGTACCTTTT
 ATACCTTGCTTATTTGAAGTTGACACATGGGTTAGTTACTACTCTCCATGTGCATTGGGGACAGTTTT
 TATAAGTGGGAAGGACTCAGTATTATTTATTTGAGATGATAAGCATTTTGTGTTGGGAACAATG

Figure 17

GGCAGAGCCGAGATGCTCGCTCCGTGGCCTTAGCTGTGCTCGCGTACTCTCTCTTTCTGGCCTGGAG
 GCTATCCAGCGTACTCCAAAGATTAGGTTTACTCACGTATCCAGCAGAGAATGGAAGTCAAATTTCC
 TGAATTGCTATGTGCTGGGTTTCATCCATCCGACATTGAAGTTGACTTACTGAAGATGGAGAGAGAAT
 TGAAAAAGTGGAGCATTGAGACTTGTCTTTAGCAAGGACTGGTCTTCTATCTCTTGTACTACACTGAA
 TTCACCCCCACTGAAAAAGATGAGTATGCCTGCCGTGTGAACCATGTGACTTTGTACAGCCCCAGATAG
 TTAAGTGGGATCGAGACATGTAAGCAGCATCATGGAGGTTTGAAGATGCCGATTTGGATTGGATGAAT
 CCAAATTCGCTTGGCTTTTAAATATTGATATGCTTATACACTTACACTTTATGCACAAAATGTAGG
 GTTATAATAATGTTAACATGGACATGATCTTCTTTATAATTCTACTTTGAGTGTCTCTCCATGTTTGTAT
 GTATCTGAGCAGGTTGCTCCACAGGTAGCTTAGGAGGGCTGGCAACTTAGAGGTGGGAGCAGAGAATT
 CTCTTATCCAACATCAACATCTTGGTCAGATTGAACTCTTCAATCTCTTGCACTCAAAGCTTTGTTAAGA
 TAGTTAAGCGTGCATAAGTTAACTTCCAATTTACATACTGCTTAGAATTTGGGGGAAAAATTGAGAAAT
 ATAATTGACAGGATTATTGGAAATTTGTTATAATGAATGAAACATTTTGTATATAAGATTCAATTTTAC
 TTCTTATACATTTGATAAAGTAAGGCATGGTTGTGTTAATCTGGTTTATTTTGTTCACAAAGTTAAAT
 AAATCATAAAACCTG

Figure 18

ATGGCCGTCATGGCGCCCCGAACCTCCTCCTGCTACTCTCGGGGGCCCTGGCCCTGACCCAGACCTGGG
 CGGGCTCCCACTCCATGAGGTATTTCTTACATCCGTGTCCCGGCCCGCGCGGGAGCCCGCTTCAT
 CGCCGTGGGCTACGTGGACGACACGCACTTCGTGCGGTTCCGACAGCGACGCGCGAGCCAGAGGATGGAG
 CCGCGGGCGCCGTGGATAGAGCAGGAGGGGCGGAGTATTGGGACCAGGAGACACGGAATGTGAAGGCC
 AGTCAAGACTGACCGAGTGGACCTGGGGACCTGCGCGGCTACTACAACAGAGCGAGGCGGTTCTCA
 CACCATCCAGATAATGTATGGCTGCGACGTGGGGTTCGACGCGGCGCTTCCCTCCGCGGTACCGGCAGGAC
 GCCTACGACGGCAAGGATTACATCGCCCTGAACGAGGACCTGCGCTCTTGGACCGCGCGGACATGGCGG
 CTCAGATCACCAAGCGCAAGTGGGAGGCGGCCATGAGGCGGAGCAGTTGAGAGCCTACCTGGATGGCAC
 GTGCGTGGAGTGGCTCCGAGATACCTGGAGAACGGGAAGGAGACGCTGCAGCGCACGGACCCCCCAAG
 ACACATATGACCCACCAACCCCATCTCTGACCATGAGGCCACCTGAGGTGCTGGGCCCTGGGCTTCTACC
 CTGCGGAGATCACACTGACCTGGCAGCGGGATGGGAGGACACAGACCCAGGACACGGAGCTCGTGGAGAC
 CAGGCTGCGAGGGGATGGAACCTTCCAGAAGTGGGCGGCTGTGGTGGTGCCTTCTGGAGAGGAGCAGAGA
 TACACCTGCCATGTGCAGCATGAGGGTCTGCCAAGCCCTCACCTGAGATGGGAGCTGTCTTCCAGC
 CCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCTTGGAGCTGTGATCACTGGAGCTGTGGT
 CGCTGCCGTGATGTGGAGGAGGAAGAGCTCAGATAGAAAGGAGGGAGTTACACTCAGGCTGCAAGCAGT
 GACAGTGCCAGGGCTCTGATGTGTCCCTCACAGCTTGTAAAGTGTGA

Figure 19

AGACGCCGAGATGCTGGTTCATGGCGCCCCGAACCGTCTCCTGCTGCTCTCGGCGGCCCTGGCCCTGACC
 GAGACCTGGGCGGCTCCCACTCCATGAGGTATTTCTACACCTCCGTGTCCCGGCCCGCGCGGGGAGC
 CCGCTTTCATCTCAGTGGGCTACGTGGACGACACCCAGTTTCGTGAGGTTCCGACAGCGACGCGCGAGTCC
 GAGAGAGGAGCGCGCGGCGCGCTGGATAGAGCAGGAGGGGCGGAGTATTGGGACCAGGACACACAGATC
 TACAAGGCCAGGACAGACTGACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACAGAGCGAGG
 CCGGGTCTCACACCTCCAGAGCATGTACGGCTGCGACGTGGGGCCGAGCGGGCGCTCCTCCGCGGCA
 TGACCATGACCGCTACGACGCAAGGATTACATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCGCG
 GACACGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCGTGAGGCGGAGCAGCGGAGAGCCTACC
 TGAGGGGCGAGTGGCTGGAGTGGCTCCGAGATACCTGGAGAACGGGAAGGACAAGCTGGAGCGCGCTGA
 CCCCCAAAGACACAGTGAACCCACCCCATCTCTGACCATGAGGCCACCTGAGGTGCTGGGCCCTG
 GGTTTCTACCTTGGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGACCAACTCAGGACACTGAGC
 TTGTGGAGACCAGACAGCAGGAGATAGAACCTTCCAGAAGTGGGAGCTGTGGTGGTGCCTTCTGGAGA
 AGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCTCACCTGAGATGGGAGCCG
 TCTTCCAGTCCACCGTCCCCATCGTGGGCATTGTGTGCTGGCCTGGCTGTCTAGCAGTTGTGGTTCATCG
 GAGCTGTGGTGGTGTGATGTGTAGGAGGAAGAGTTTCAAGTGGAAAAGGAGGAGCTACTCTCAGGC
 TGCGTGACGACAGTGGCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAGGCTGAGACAGCTGTCTT
 GTGAGGAGTGGAGTGCAGGATTTCTTACGCTCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTT
 CTGCAAAAGGCACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCC
 TTGTGTCACTGTGACCCCTGTTTCGATGCTGACCTGTGTTTCTCCCA

Figure 20

GAATTCGGGGGGGAGATGCGGGTCATGGCGCCCCGAACCTCATCCTGCTGCTCTCGGGAGCCCTGGCCC
 TGACCGAGACCTGGGCGGCTCCCACTCCATGAGGTATTTCTCCACATCCGTGTCTTGGCCCGGCCGCGG
 GGAGCCCGCTTTCATCGCAGTGGGCTACGTGGACGACACGCACTTCGTGCGGTTCCGACAGCGACGCGCG
 AGTCCAAGAGGGGAGCGCGGGAGCCGTGGGTGGAGCAGGAGGGGCGGAGTATTGGGACCGGGAGACAC
 AGAAGTACAAGCGCCAGGCACAGGCTGACCGAGTGAACCTGCGGAACTGCGCGGCTACTACAACAGAG
 CGAGGACGGGTCTCACACCTCCAGAGGATGTTGGGTGCGACCTGGGGCCGAGCGGGCGCTCCTCCG
 GGGTATAACCAAGTTCCCTACGACGGCAAGGATTACATCGCCCTGAACGAGGATCTGCGCTCCTGGACCG
 CCGCGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCGTGAGGCGGAGCAGCGGAGAGC
 CTACCTGGAGGGCAGTGGCTGGAGTGGCTCCGAGATACCTGGAGAACGGGAAGGAGACGCTGCAGCGC
 GCGGAACACCCAAAGACACAGTGAACCCACCATCCCGTCTCTGACCATGAGGCCACCTGAGGTGCTGGG
 CCTGGGCTTCTACCTGCGGAGATCACACTGACCTGGCAGTGGGATGGGAGGACCAAACTCAGGACAC
 CGAGCTTGTGGAGACGAGGACGAGGATGGAACCTTCCAGAAGTGGGACAGCTGTGGTGGTGCCTTCT
 GGAGAAGAGCAGAGATACAGTGGCATGTTTCCAGCAGGAGGGGCTGCCGAGCCCTCACCTGAGATGGA
 AGCCGTCTTCCAGCCACCATCCCATCGTGGGCATCGTTGTGGCTGGCTGTCTGGCTGTCTTAGC
 TGTCTAGGAGCTATGGTGGCTGTGTGATGTGTAGGAGGAAGAGCTCAGGTGGAAAAGGAGGGAGCTGC
 TCTCAGGCTGCGTCCAGCAACAGTGGCCAGGGCTCTGATGAGTCTCTCATCGTTGTAAAGCCTGAGACA
 GCTGCCCTGTGTGGACTGAGATGCAAGATTTCTTCAACCTCTCTTTGTGACTTCAAGAGCCTCTGGCA
 TCTCTTTCTGCAAAAGGCATCTGAATGTGTCTGCGTTCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAG
 CCCACCCCGTGTCCACCTGACCCCTGTCCCACTGACCTGTGTTCCCTCCCGATCATCTTCTCTG

TTCCAGAGAAGTGGGCTGGATGTCTCCATCTCTGTCTCAACTTCATGGTGCCTGAGCTGCAACTTCTTA
CTTCCCTAATGAAGTTAAGAACCCTGAATATAAATTTGTTTCTCAAAATATTGCTATGAAGGGTTGATGG
ATTAATTAATAAGTCAATTCTGGAAGTTGAGAGAGCAAATAAAGACCTGAGAACCCTTCAAAAACCCG
CCCGAATTC

Figure 21

ATGGTAGATGGAACCCCTCCTTTTACTCCTCTCGGAGGCCCTGGCCCTTACCCAGACCTGGGCGGGCTCCC
ACTCCTGAAGTATTTCCACACTTCCGTGTCCCGGCCCGCGCGGGAGCCCCGCTTCATCTCTGTGGG
CTACGTGGACGACACCCAGTTCTGTGCGCTTCGACAACGACGCGCGAGTCCGAGGATGGTGC CGCGGGCG
CCGTGGATGGAGCAGGAGGGGTGAGATATTGGGACCGGGAGACCGGAGCGCCAGGGACACCGCACAGA
TTTCCGAGTGAACCTGCGGACGCTGCGGGCTACTACAATCAGAGCGAGGCCGGGTCTCACACCCTGCA
GTGGATGCATGGCTGCGAGCTGGGGCCCCGACGGGCGCTTCTCCGCGGTATGAACAGTTTCGCTACGAC
GGCAAGGATTATCTCACCTGAATGAGGACCTGCGCTCCTGGACCGCGGTGGACACGGCGGGCTCAGATCT
CCGAGCAAAAGTCAAATGATGCCCTCTGAGGCGGAGCACCAGAGAGCCTACCTGGAAGACACATGCGTGGA
GTGGCTCCACAAATACCTGGAGAAGGGGAAGGAGACGCTGCTTCACCTGGAGCCCCAAAGACACACGTG
ACTCACACCCCATCTCTGACCATGAGGCCACCCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA
TCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGACACGGAGCTCGTGGAGACACAGGCCTGC
AGGGGATGGAACCTTCCAGAAGTGGGCGAGCTGTGTTGCTGCTTCTGGAGAGGAGCAGAGATACACGTGC
CATGTGCAGCATGAGGGGCTACCCGAGCCCGTCAACCCTGAGATGGAAGCCGGCTTCCAGCCACCATCC
CCATCGTGGGCATCATGTGCTGGCTGGTTCTCTTGGATCTGTGTTCTCTGGAGCTGTGGTTGCTGTGT
GATATGGAGGAAGAAGAGCTCAGGACATTTCTTCCAACAGGTGGAAGAGGAGGAGCTACTCTAAGGCT
GAGTGGAGCGACAGTGCCAGGGGTCTGAGTCTCACAGCTGTGA

Figure 22

ATGGCGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTGGGCGGGCTCCC
ACTCCTTGAGGTATTTTCCAGCACCGCTGTGTGCGGCCCGCGCGGGAGCCCCGCTACATCGCCGTGGA
GTACGTAGACGACACGCAATTCCTGCGGTTTCGACAGCGACGCGCGATTCCGAGGATGGAGCGCGGGAG
CCGTGGGTGGAGCAAGAGGGGCCGAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGA
CTGACCGAGTGGCCCTGAGGAACCTGCTCCGCCCTACAACAGAGCGAGGCTGGGTCTCACACCCTCCA
GGGAATGAATTGCTGCCACATGGGGCCCCGACGGACGCTCCTCCGCGGTATCACAGCACGCGTACGAC
GGCAAGGATTACATCTCCCTGAACGAGGACCTGCGCTCCTGGACCGCGCGGACACCGTGGCTCAGATCA
CCCAGCGCTTCTATGAGGAGAGGAATATGACAGGAGTTCAGGACCTACCTGGAGGGCGAGTGCCTGGA
GTTGCTCCGCAGATACTTGGAGAATGGGAAGGAGACGCTACAGCGCGCAGATCCTCCAAAGGCACACGTT
GCCACACCCCATCTCTGACCATGAGGCCACCCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA
TCACGCTGACCTGGCAGCGGGATGGGGAGGAACAGACCCAGGACACAGAGCTTGTGGAGACACAGGCCTGC
AGGGGATGGAACCTTCCAGAAGTGGGCGCTGTGTTGCTGCTTCTGGAGAGGAACAGAGATACACATGC
CATGTGCAGCACGAGGGGCTGCCACGCCCTCATCTGAGATGGGAGCAGTCTCCCGAGCCACCATCC
CCATCGTGGGCATCGTTGCTGGCTTGTGCTTGGAGCTGTGTTCACTGGAGCTGTGGTGTGCTGCTGT
GATGTGAGGAAGAAGAGCTCAGATAGAAAAGAGGGAGCTACTCTCAGGCTGCAGTCACTGACAGTGCC
CAGGGCTCTGGGGTGTCTCTCACAGCTAATAAAGTGTGAGACAGCTTCTTGTGTGGGACTGAGAAGCAA
GATATCAATGTAGCAGAATTGCACTTGTGCTCACGAACATACATAAATTTTAAAAATAAGAATAAA

Figure 23

CCCATTAGGTGACAGGTTTTTAGAGAAGCCAATCAGTCGCGCGGTCTGGTTCTAAAGTCTCGCTCA
CCCACCGGACTCATTTCTCCCAGACGCAAGGATGGTGGTCAATGGGCGCCGAACCCCTCTCTCTGTGC
TCTCGGGGGCCCTGACCTGACCGAGACCTGGGCGGGCTCCCACTCCATGAGGTATTTACGCGCCCGCGT
GTCCCGGCCCGCGCGGGAGCCCCGCTTCATCGCCATGGGCTACGTGGACGACACGCAGTTCTGTGCGG
TTCGACAGCGACTCGGCGTGTCCGAGGATGGAGCCGCGCGCGGTGGGTGGAGCAGGAGGGCCGAGT
ATTGGGAAGAGGAGACACGGAACACCAAGGCCACGCACAGACTGACAGAATGAACCTGCAGACCCTGCG
CGGCTACTACAACAGAGCGAGGCCAGTTCTCACACCCTCCAGTGGATGATTGGCTGCGACCTGGGGTCC
GACGACGCTCCTCCGCGGGTATGAACAGTATGCCTACGATGGAAGGATTACCTCGCCCTGAACGAGG
ACCTGCGCTCCTGGACCGCAGCGGACACTGCGGCTCAGATCTCCAAGCGCAAGTGTGAGGCGCCAAATGT
GGCTGAACAAAGGAGAGCCTACCTGGAGGGCACGTGCGTGGAGTGGCTCCACAGATACCTGGAGAACGGG
AAGGAGATGCTGCAGCGCGGACCCCCCAAGACACACGTGACCCACCACCTGTCTTTGACTATGAGG
CCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGATCATACTGACCTGGCAGCGGGATGGGA
GGACAGACCCAGGACGTGGAGCTCGTGGAGACAGGCTGCAGGGGATGGAACCTTCCAGAAGTGGGA
GCTGTGGTGGTGCCTTCTGGAGAGGAGCAGAGATACAGTGCATGTGCAGCATGAGGGGCTGCCGAGC
CCCTCATGCTGAGATGGAAGCAGTCTTCCCTGCCACCATCCCATCATGGGTATCGTTGCTGGCTGGT
TGTCTTGCAGCTGTAGTCACTGGAGCTGCGGTGCTGTGCTGTGGAGAAAGAAGAGCTCAGATTGA
AAAGGAGGGAGCTACTCTCAGGCTGCAAGTAAGTATGAAGGAGGCTGATCCCTGAGATCCTTGGGATCTT

GTGTTTGGGAGCCATGGGGGAGCTACCCACCCACAATTCCTCCTCTGGCCACATCTCCTGTGGTCTCT
 GACCAGGTGCTGTTTTTGTCTACTCTAGGCAGTGACAGTGCCCGGGCTCTAATGTGTCTCTACGGCT
 TGTAATGTGACACCCCGGGGGGCTGATGTGTGGGTGTGTGAGGGGAACAGGGGACATAGCTGTGCT
 ATGAGGTTTCTTTGACTTCAATGTATGAGCATGTGATGGGCTGTTTAAAGTGTACCCCTCACTGTGAC
 TGATATGAATTTGTTCATGAATATTTTCTGTAGTGTGAAACAGCTGCCCTGTGTGGGACTGAGTGGCAA
 GTCCCTTTGTGACTTCAAGAACCCTGACTTCTCTTTGTGCAGAGACCAGCCACCCCTGTGCCACCATG
 ACCCTCTCTCATGCTGAACGTCATTCCTTCCCAATCACCTTTCCTGTCCAGAAAAGGGGCTGGGAT
 GTCTCCGTCTGTCTCAAATTTGTGGTCCACTGAGCTATAACTTACTTCTGTATTAAAAATTAGAATCTG
 AGTATAAATTTACTTTTTCAAATTTATTTCCAAGAGAGATTGATGGGTAAATTAAGGAGAAGATTCTCTGA
 AATTTGAGAGACAAAATAAA

Figure 24

atgaccgctttggaaaaacaaagactgtatttcctggaaattaatgtttattcaataaactgtgtattcagctatatcacatagt
 gtgaggctgaaatgaggcgggaagaggcggttggggcttaattatatcaatttgggtggccccacagcgccccaaggcg
 ccagtcctgttttgacaagttgcctctggaagcctctacaatgcctctctcttttctccagagtaagcggaggccaggggcc
 cccggcctctgctaataactaaaaaacagctgttgcataagtaagattgggtggaacattcaggcctgggtggagag
 gcttttgcctccttgcaaaaccacactgacattccaggcctgggtggagaggcttttgcctccttgcaaaaccacactg
 cccctggaggcgagttgcctagcaactaactaaaaggaggtgtcgcacggccagctgcggtcagtagtcacttctgctt
 aactgacttgacattttctatttaagagtgggaggaaaattactgtgttggaggccctccgccatctctgaagctgaatcga
 attaactgtttattgcagcttataatggttacaaataaagcaatagcatcacaaatttcacaaataaagcatttttctactgcatt
 ctagtgtgtgttgcctaaactcatcaatgtatcttatcatgtctggatctgatatcatcgtcgacattgatttactagtattaa
 tagtaatcaattacggggctcattagttcatagcccatatattggagttccgcgttacataacttacggtaaatggccgcctggc
 tgaccgccaacgacccccgccattgacgtcaataatgacgtatgtcccatagtaacgccaatagggactttccattgac
 gtcaatgggtggactatttaccggtaaactgccacttggcagtagcatcaagtgtatcatatgccaagtacgccccctattgac
 gtcaatgacggtaaatggccgcctggcattatgccagtagacattatgggactttcttacttggcagtagatctacgta
 ttagtcatcgtctattaccatgggtcaggtgagccacgttctgcttactctccccatccccccccctccccacccccaat
 tttgtatttatttttaattattttgtgcagcgatggggggcggggggggggggcgcgccaggcggggcgggggcg
 gggcgaggggcgggggcgaggcgaggcgagggtgcggcgagcgaatcagagcgcgcgctccgaaagtttcc
 tttatggcgaggcgggcgggcgggcgccctataaaaaagcgaagcgcgcgggcgggcgaggagtcgctgcgttgccttc
 gccccgtccccgctccgcgcgcctcgcgcgcggcgccccggctctgactgaccggttactcccacagggtgagcgg
 gcgggacggcccttctcctccgggctgtatattagcgttgggttaatgacggctcgttcttctgtggtcgtgaaagcctt
 aaagggtccgggaggggcccttgtgcgggggggagcggctcgggggggtgcgtgctgtgtgtgtgctggggagcg
 ccgctgctggcccgctgcccggcggtgtgagcgtcggggcgcgggcggggcttgtgcgtccgcgtgtgcg
 cgaggggagcgcggcgggggcggtgccccgggtgctggggggggtgcgagggggaacaaaggctgcgtgcgggg
 tgtgtgcgtgggggggtgagcagggggtgtggcgcgggcggtcgggctgtaacccccctgcacccccctccccgag
 ttgctgagcacggcccggttcgggtgcggggctccgtgcggggcggtggcgcggggctcgggtgcccggcggggg
 gtggcggcaggtgggggtgcccggcgggggcgggggccgctcggggcggggagggctcgggggagggggcgcggc
 ggccccggagcgccggcggtgtcgaggcgcgcgagcgagccattgcctttatggtaatcgtgcgagaggggcg
 agggactcctttgtcccaaatctggcgagccgaaatctgggagggcgccgcccaccccccttagcggggcgggggcg
 agcggtgcggcgccggcaggaaggaaatggcggggagggccttctgtcgtcgcgcgcgcgtcccttctccatc
 tccagcctcggggctgcccaggggggacggctgccttgcggggggaggggcagggcggggttcggcttctggtg
 tgaccggcggtctagagcctctgtaaccatgttcatgcttcttctttctacagctcctgggcaacgtgctgtgtgtg
 ctgtctcatcttttggcaagaattcctcgagctcaagctcgaattctgcagtcgacggtaccgcggggccgggacccac
 cggctgccaccatgggtgagcaaggcgaggagctgtaccgggggtgtgcccacctcgtgagctggagggcgagc
 taacggccacaagttcagcgtgtccggcgaggcgaggggcatgccacctacggcaagctgacctgaagttcatctg
 caccaccggcaagctgcccgtgcccgtgcccaccctcgtgaccacctgacctacggcgtgcagtgctttagcgcgtacc
 ccgaccacatgaagcagcacgacttctcaagtccgcatgcccgaaggctacgtccaggagcgaccatcttctcaag
 gacgacggcaactacaagaccgcgcccgggtgaagttcagggcgacaccctgggtgaaccgcatcgagctgaaggg
 catcgacttcaaggaggacggcaacatcttggggcacaagctggagtacaactacaacagccacaacgtctatatcatgg
 ccgacaagcagaagaacggcatcaaggtgaacttcaagatccgcacaacatcaggacggcagcgtgcagctcggcg
 accactaccagcagaacacccccatcgggcagggccccgtgctgtgcccagacccactacctgagcaccagtcgg
 ccctgagcaagacccccagagaagcgcatcacatgtgctgctgtgaggtcgtgaccggcgccgggatactctcgg

catggacgagctgtacaagtaaagcgccgctcgataagcttgatacgaattccgccctctccctccccccccctaac
gttactggccgaagccgcttggataaaggccggtgtgcgtttgtctatatgtattttccaccatattgccgtcttttggcaatgt
gagggcccggaacctggccctgtcttctgacgagcattcctagggtctttccctctcgccaaaggatgcaaggctgtg
ttgaatgtcgtgaagggaagcagttcctctggaagcttctgaagacaaacacgtctgtagcgaccctttgcaggcagcgga
acccccacctggcgacaggtgcctctcgccgcaaaagccacgtgtataagatacacctgcaaaaggcgccacaacccca
gtggcacggtgtgagttggatagttgtgaaagagtcacatggctctcctcaagcgtaattcaacaaggggctgaaggatgcc
cagaaggtaacccattgtatggatctgatctggggcctcggtgcacatgctttacatgtgttagtcgaggttaaaaaacgtc
tagggcccccgaaccacggggacgtggtttccttgaaaaacacgatgataatatggccacaaccatgaccgagtacaag
cccacggtgcgctcgccacccgcgacgacgtccccgggcccgtacgacccctcgccgcccgttcgcccactacccc
gccacgcgccacaccgtcgatccggaccgccacatcgagcgggtcaccgagctgcaagaactcttctcagcgcgctcg
ggctcgacatcgcaaggtgtgggtcgcggacgacggcgccgctgggtggcggctggaccacgcccggagagcgtcgaa
gcggggggcgggtgttcgcccagatcgcccgcatggccgagttgagcgggttcccggctggccgcccagcaacagat
ggaaggcctcctggcgccgcaccggcccaaggagcccgtgtgttcttggccaccgtcggcgctcgcggcgaccacca
gggcaagggtctgggcagcgccgtcgtgctccccggagtgaggcgccgagcgcgggggtggcgcttctctgg
agacctcgcgccccgcaacctccccctctacgagcggtcggctcaccgtcaccgccgacgtcgaggtggcggaagg
accgcgcacctggtgatgaccgcaagcccgggtgctgacgcccggccacgaccgcagcgcccgaccgaaaggga
gcgcacgaccccatgcatcgatgatctagagctcgctgatcagcctcgactgtgcttcttagttgccagccatctgtgttgc
ccctccccgtgcttcttaccctggaaggtgccactccgactgtcttcttaataaaatgaggaaattgcatcgattgt
ctgagtaggtgtcattctatctgggggggtgggtggggcaggacagcaagggggaggattgggaagacaatagcaggc
atgctggggatcggtgggtctatggcttctgagggcgaagaacctgcagcccaagctggcgtaatcatggtcatagc
tgttctgtgtgaaattgtatcgctcacaattccacacaacatacagccggaagcataaagtgtaaagcctgggggtgcc
taatgagtgagtaactacattaattgcgttgcgtcactgcccgttccagtcgggaaacctgtcgtgccagcggatccg
catctcaattagtcagcaaccatagtcggcccttaactccgcccactccgccccttaactccgcccagttccgcccattctc
gcccctaggctgactaatttttttatgtatgcagaggccgagccgctcggctctgagctattccagaagtagtgaggag
gcttttttggaggcctaggcttttgaaaaagctaactgtttatgtcagcttataatggttacaaataaagcaatagcatcaca
attcacaaataaagcattttttactgcattctagttgtgtttgtccaaactcatcaatgtatcttatcatgtctggatccgctgc
attaatgaatcgccaacgcgcggggagaggcggttgcgtattggcgctcttccgcttctcgtcactgactcgtcgcg
ctcggctcgtcggctgcggcgagcggatcagctcactcaaggcggtataacggttatccacagaatcaggggataacg
caggaaagaacatgtgagcaaaaggccagcaaaaggccaggaaaccgtaaaaggcgcggtgtgctggttttccatag
gctccgccccctgacgagcatcacaataacgacgtcaagtcagaggtggcgaaacccgacaggactataaagatac
caggcggttccccctggaagctccctcgtgcgctctcctgttccgacctgcccgttaccggataacctgtccgcttctccct
tcgggaagcgtggcgcttctcaatgctcacgctgtaggtatctcagttcgggttaggtcgttcgctcgaagctgggctgtgt
gcacgaacccccgttcagcccaccgctgcgcttatccggtaactatcgtcttagtccaacccggtaagacacgactt
atcgccactggcagcagccactggtaacaggattagcagagcgaggtatgagcggtgtctacagagttctgaagtgtg
ggcctaactacggctacactagaaggacagattgtatctgcgctcgtgaagccagttaccttggaaaaagagttggt
agctcttgatccggcaaaacaaaccaccgctggtagcgggtgtttttgttgcagcagcagattacgcgcagaaaaaag
gatctcaagaagatccttgatctttctacgggtgtgacgtcagtggaacgaaaactcacgttaagggaatttggatga
gattatcaaaaaggatcttaccatagatccttttaattaaaaatgaagttttaaatcaatctaaagtatatagtaaacttgg
ctgacagttaccaatgcttaatacagtgaggcacctatctcagcgatctgtctatttcttcatcatagttgcctgactccccgtc
gtgtagataactacgatacgggagggttaccatctggccccagtgctgcaatgataccgcgagacccacgctcaccggc
tcagatttatcagcaataaaccagccagccggaaggccgagcgcagaagtggctcctgcaactttatccgctccatcca
gtctattaattgttccgggaagctagagtaagtgttcgccagtaaatgttgcgcaacgttgttgcattgctacaggcatc
gtggtgtcacgctcgtcgttggatgggttcattcagctccgggtcccaacgatcaaggcgagttacatgatccccatgttg
tgcaaaaagcggttagctcctcggctcctcgatcgttgcagaagtaagtggccgaggttatcactcatggttatggca
gcactgcataattcttactgtatgccatccgtaagatgctttctgtgactggtagtactcaaccaagtcattctgagaata
gtgtatcgccgaccgagttgcttgcggcgctcaaacgggataataccgcgccacatagcagaactttaaaagtgtc
catcattgaaaaagcttctcggggcgaaaaactctcaaggatcttaccgctgttgagatccagttcgtatgaacccactcgtg
caccacactgatcttcagcatctttactttaccagcggttctgggtgagcaaaaacaggaaggcaaatgccgcaaaaa
gggaataaggcgacacggaaatgttgaatactcactcttcttttca